

West Virginia WISEWOMAN

Health education interventions for cardiovascular risk
reduction in women age 40-64

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West Virginia WISEWOMAN

West Virginia WISEWOMAN is one of the six CDC funded WISEWOMAN research studies designed to reduce cardiovascular risk for low-income uninsured and underinsured women aged 40-64 through implementation of health education interventions

- 9 additional states have WISEWOMAN as service projects

WISEWOMAN programs are offered through the Breast and Cervical Cancer Screening programs in each of these states

West Virginia WISEWOMAN was funded from 2003-2008 to develop and test behavioral interventions designed for women in rural Appalachia



West Virginia WISEWOMAN

Goal: Evaluate the effectiveness of the West Virginia WISEWOMAN intervention strategies to reduce cardiovascular risk

- Decrease dietary fat intake
- Increase vegetable & fruit intake
- Increase physical activity
- Increase HDL cholesterol (secondary)
- Decrease B/P in hypertensive women (secondary)

Experimental two group research design

Thirteen clinical sites in the northern and southern counties of West Virginia are participating



West Virginia WISEWOMAN

Baseline and 12 month follow-up of all participants

- Health risk and behavioral survey

Diet, physical activity, smoking assessment

Psychosocial mediators of change (knowledge, attitudes, social support systems, readiness to change)

- Clinical assessment

HDL and total cholesterol

Glucose

BMI

Waist circumference

Blood pressure



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Socio-demographic data (N = 733)

Age

40-49	37.4
50-65	62.6

Married/partner 64.8

Education

< 9 th grade	6.0
Some high school	13.0
High school/GED	49.9
Some college	31.1

Ethnicity

White	93.7
African American	4.4
Other	1.8



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Data from 733 study participants show high risk for cardiovascular and other chronic disease

Overweight (BMI 25 - 29.9)	24%
Obese (BMI \geq 30)	60%
Smoker	30%
Father/brother heart attack before age 55	25%
Mother/sister heart attack before age 65	23%
Total cholesterol \geq 240 or on medication	44%
HDL cholesterol $<$ 40	29%
Blood pressure \geq 140/90 or on medication	56%
Glucose \geq 200 or history of diabetes or on medication	25%



West Virginia WISEWOMAN

There are four intervention components for West Virginia WISEWOMAN

Cookin' Up Health, a culturally targeted computer-based interactive nutrition program

Tailored print-based health communications to reinforce change in nutrition and physical activity behavior

Self-help smoking booklet for smokers who are thinking or planning to quit

Pedometers given to participants at the initial visit along with booklet to keep track of steps



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Health education interventions are informed by behavioral theory

Cookin' Up Health focuses on:

- enhancing behavioral capability to increase knowledge and skills to facilitate positive changes, and self-efficacy to increase one's confidence to make dietary behavioral change (Social Cognitive theory)
- the benefits, barriers and cues to action to initiate change, stressing the benefits of, and overcoming barriers to change (Health Belief Model)

The Transtheoretical Model forms the basis of the **Tailored Health Communications**, with content informed by the Health Belief Model



West Virginia WISEWOMAN

Using a cooking show theme, **Cookin' Up Health**

- discusses the benefits of healthy eating (fruits and vegetables, lower fat foods)
- provides information on dietary fats, serving sizes of various foods, and nutrition labeling
- demonstrates step-by-step meal preparation emphasizing healthy selection and portion control.

Woven in with the recipes are information and tips on nutrition.

The program encourages users to try lower fat cooking methods and increase fruits and vegetables in recipes



West Virginia WISEWOMAN

Prior to developing *Cookin' Up Health* formative research in the form of focus groups with women in two rural counties in West Virginia were conducted to guide the development of the intervention. Findings showed:

- weight loss was more of a motivator for dietary change than was preventing heart disease
- social support both a barrier and facilitator for dietary change
- cultural heritage and the way women were raised were major barriers to making health changes as adults
- convenience and the cost of eating healthier were major factors when trying to make dietary changes
- women did not feel confident in their ability to maintain dietary changes

These themes were used to inform the content and design of the intervention



Cookin' Up Health

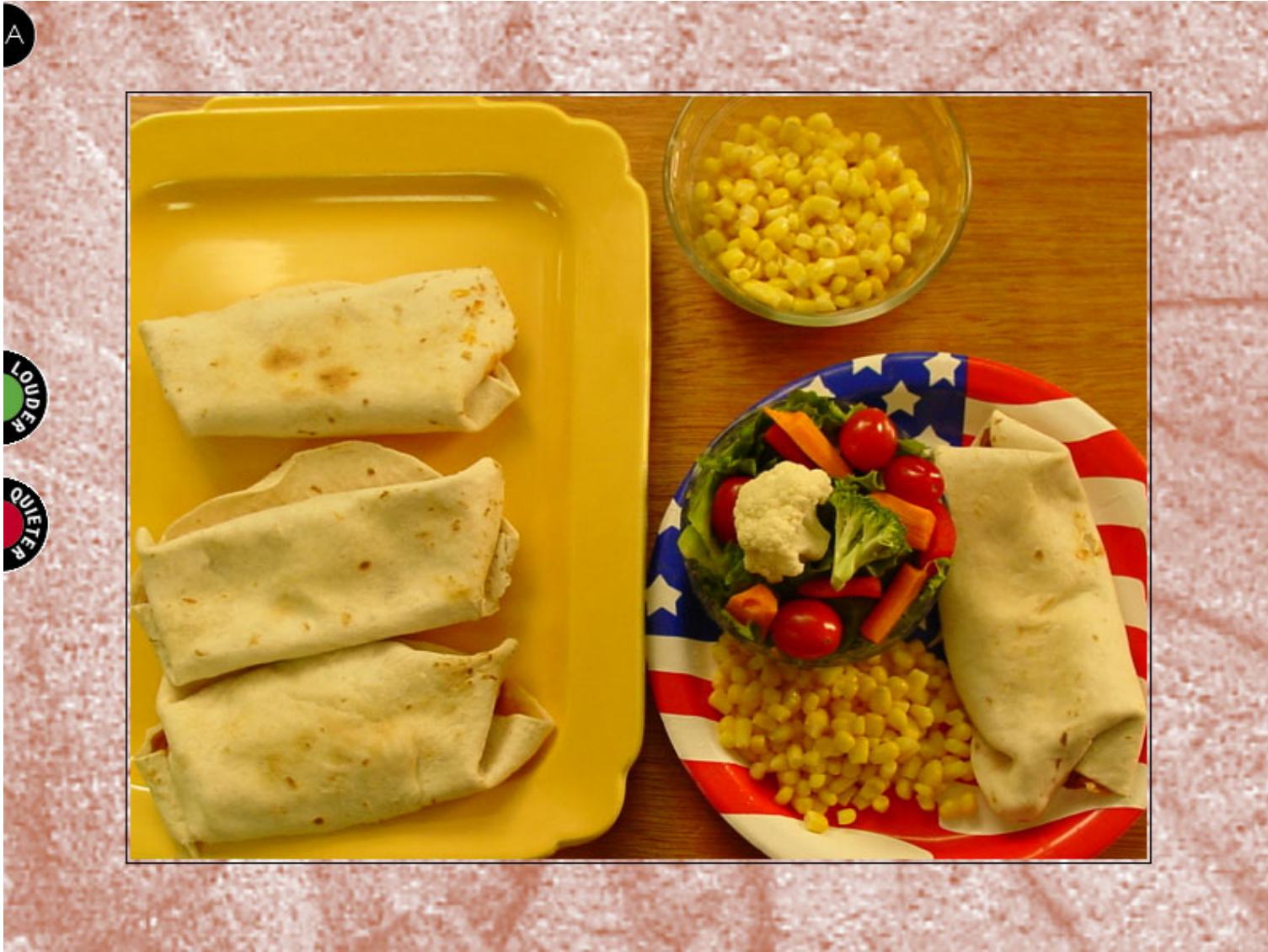


A

LOUDER

QUIETER





A

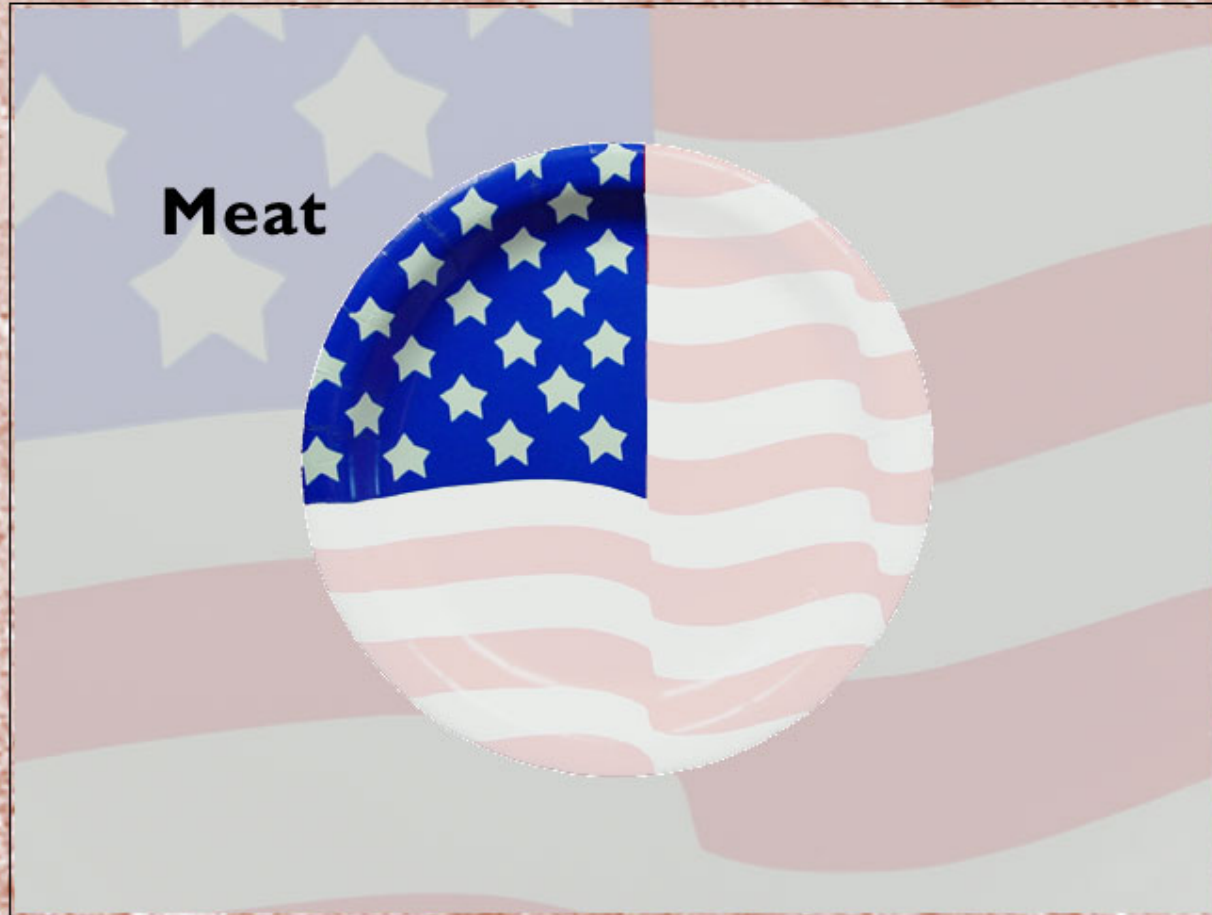
One serving of
**Raw Leafy
Vegetables**



**One
Whole
Cup**



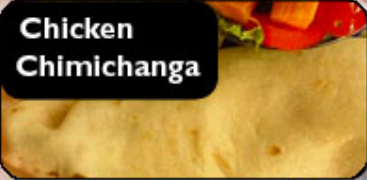
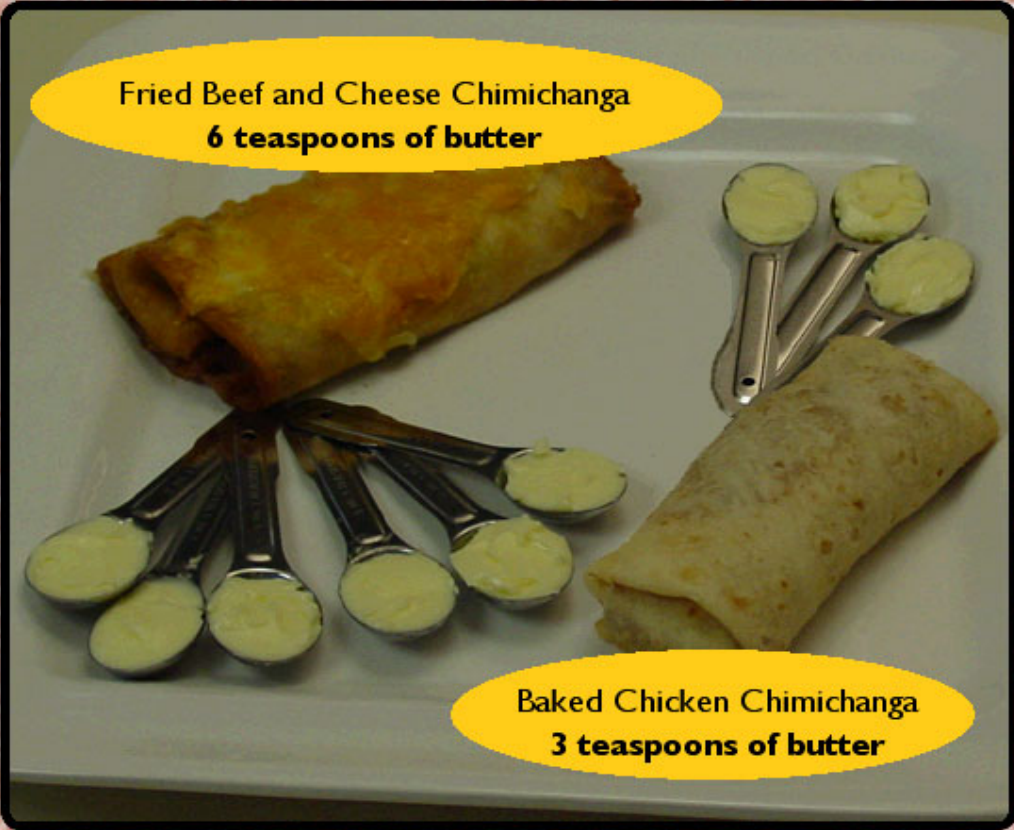
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DONE

A

Oven Fried Chicken

with coleslaw and peas & carrots

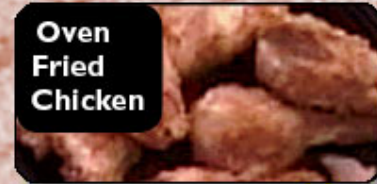
Total Cost

\$12.00

for 13 servings

92¢ per serving

Oven Fried Chicken



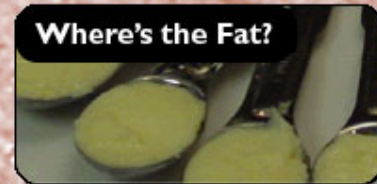
Reducing Total Fat



5-a-Day



Where's the Fat?



What Does It Cost?



DONE

A

main dishes

- Oven Fried Chicken
- Skillet Beef
- BBQ Pork
- Stir-fry Chicken

desserts

- Banana Pineapple Delight
- Jello Salad
- Angel Food Cake

health tips

- Saturated Fat
- Hydrogenated Oil
- Reducing Total Fat
- 5-a-Day
- Nutrition Labels

DONE

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Cookin' Up Health

An update to the program in 2005 added messages:

- Energy balance
- Increasing physical activity (walking)
- Build A Meal - chose foods for a meal showing calories, total fat, saturated fat, sodium and fiber content
- Portion size quiz
- Nutrition label reading quiz
- Metabolic syndrome
- Glycemic index

Now web based: www.cookinuphealth.com

(can try out by going to: www.peopledesigns.com)



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Print-based tailored health communications

- reinforce nutrition messages of Cookin' Up Health
- encourage change in physical activity (pedometer use)

Tailored print health communications sent to women at home

Physical activity – 2, 4, and 8 months

Nutrition – 3, 5, and 9 months

Each health communication:

- 4 page (folded 11x17)
- theme
- quotes from women
- testimonials about changing

West Virginia scenery and people

Reading level – 6th grade

Slight differences if single or family



West Virginia WISEWOMAN

Stage of readiness to change

Precontemplation

Not engaging in behavior

Not thinking of changing

Message theme: increase awareness of need, benefits of change

Contemplation/Preparation

Not engaging in behavior

Thinking or planning to change

Message theme: reduce barriers to change, action plans

Action

Engaging in behavior

Message theme: Encouragement, support to reinforce change, relapse prevention



Precontemplation

West Virginia
WISEWOMAN

Community Health Initiatives • West Virginia University

Volume 1

Physical Activity for Life

Why Is Physical Activity Important?

"I am not what you would call an active person. I used to be active as a child but I hardly get any exercise now. Not long ago, however, my doctor said I had a problem with my blood sugar. She told me if I did not change my lifestyle, my health would only get worse. I was surprised when I found out that just increasing my physical activity a little and changing some things I ate could improve my sugar. So, I began walking more each day and doing my own yard work. I've lost weight and I have more energy." Joanne

A Little Goes a Long Way

Becoming physically active may be the most important thing you can do for your health! Active women live longer, feel better, and are healthier than those who are not active. Increasing your physical activity a little each day can make big changes in improving your health.

What Is Physical Activity?

Physical activity doesn't have to be exercise. Forget the old sayings like "no pain, no gain" or "you've got to sweat for it to count." Physical activity is any kind of body movement that results in calories being burned. This includes housework, line dancing, or walking while shopping. The thing to remember is that **all activity counts** and every bit helps.

Contemplation/Preparation

3CS

West Virginia



Healthy Eating for Life

Community Health Initiatives • West Virginia UniversityVolume **2**



Why Is It Hard to Eat Healthy?

Have you ever said, "I know I should eat better, but it's just too hard?" Well, you're not alone! Many women want to start eating healthier, but find that things keep getting in the way:

- "There's not enough TIME to cook."
- "Healthy foods COST too much."

Sounds familiar? If things like time and money are keeping you from a healthier life, don't despair! There is good news!

Good News! Change Does Not Have to Be Hard

Eating healthier means just that, HEALTHI-ER! Many women make the mistake of thinking they have to change everything all at once. The truth is: every little change makes a difference!

The Key to Success

The key to success is to start with small simple changes:

- ★ Slowly add more fruits and vegetables to your diet.
- ★ Slowly cut down on saturated fat and trans fatty acids.

This month's newsletter will share some simple planning and shopping tips that make healthy eating doable. These tips will help get you on the road to a healthier life!





Physical Activity for Life

Community Health Initiatives • West Virginia University

Volume

3



Active for Life

If you have been active for a while, you are probably pleased with the many benefits you get from it. But, you also might have concerns about falling back to your old ways. While there are things that get in the way of staying active, sometimes it's just excuses or how you feel that stop you. Being aware of these pitfalls can help you come up with simple solutions to stay positive and stick with being active over time. This month's newsletter will discuss how you can use positive thoughts and feelings to stay physically active.



Turning Excuses Into Good Feelings

Many women feel tired or sleepy at the end of a busy day. Many also feel stressed out by the demands of work and personal things. It can be hard to find the willpower to be active when you feel tired or stressed out. These feelings can get in the way of staying active. It's easy to use them as excuses to not exercise.

Let's look at these emotions and how they can be turned into good feelings with physical activity:

<i>Tired, Sleepy</i>▶	Awake, Alert
<i>Drowsy</i>▶	Energized
<i>Angry, Irritated</i>▶	Calm, Patient
<i>Depressed</i>▶	Positive, Upbeat
<i>Sad, Negative</i>▶	Cheerful
<i>Worried, Anxious</i>▶	Self-confident
<i>Stressed, Tense</i>▶	Stress Resistant, Relaxed

If you're feeling down or tired, physical activity is one of the best ways to feel better in MINUTES!

Take a Break and Walk

"I used to exercise to stay in shape but it was never fun because I worked out too hard. When my life got stressful and busy, I stopped exercising because I was too tired and couldn't fit physical activity into my schedule. Then I felt guilty and frustrated with myself. I finally figured out that if I just aimed for light exercise, I could stay active without totally stopping my routine. Just taking a few breaks to walk during the day helped me keep moving and feeling better too."

Slipped Up? Don't Give Up!

It is normal to feel guilty or angry if something keeps you from reaching your activity goals. You might be tempted to give up and feel like you "failed" or "lost" your battle with self-discipline. Being physically active, however, is not about winning or losing. It's normal to slip up now and then. To get back on track, use the positive thoughts and feelings you get from exercise to motivate you to begin again. Remember, walking can be a great way to stay active when the going gets tough.

"Change does make a difference."



Wisdom From the Hills

"I've found life is a lot like walking in West Virginia. It's hard to find flat ground. You are either going up or down a hill. Life is full of ups and downs too—some days are easy and pleasant and others are tough. The joy I get from walking is the motivation that keeps me going when my life gets crazy." Patty

Well-Being for You and Others

When you feel good about yourself, it can make others feel the same way. You not only handle your own stress better when you are physically active, you can help others deal with theirs, too. Let your family and others know how much a little physical activity improves your mood and encourage them to join you. Turn "misery loves company," into "positive energy loves company."

Are Fats Good or Bad?

In the Cookin' Up Health computer program you learned that not all fats are bad. There are good fats called Omega 3 fatty acids. You should eat and enjoy these fats. The fats to watch are the saturated and trans fats.

Saturated fat is found in all animal products, coconut oil, and palm oils. The best way to eat less saturated fat is to choose lean cuts of meat. Cut the fat and skin off meat before cooking. Also, eating milk products that are low-fat, such as 1% or skim milk, and part skim cheeses. Using olive oil instead of butter in cooking will help lower saturated fat intake.



Trans fatty acids are found in hydrogenated oil, a product that is used in many processed foods such as margarine, cookies, crackers, peanut butter, and microwave popcorn. It is also found in fast foods that are fried, including fried fish. It is listed on the ingredient label, not the nutrition label, as hydrogenated oils or partially hydrogenated oils. The ingredient label is usually on the side of the package and lists ingredients from the highest to the lowest amount. If you see either hydrogenated oil or partially hydrogenated oil in the first three ingredients, the food has a lot of it.

Omega 3 fats are found in fatty fish, walnuts, tofu, soybeans, flaxseeds and flaxseed oil. Omega 3 fats have reduced death, nonfatal heart attacks, and nonfatal strokes in persons with heart disease. It can also slow the heart disease process.

The American Heart Association recommends that people eat fatty fish at least two times a week. Fish is a good source of protein and is low in saturated fat.

Fatty fish include:

- ★ Salmon
- ★ Rainbow trout
- ★ Herring
- ★ Sardines
- ★ Albacore tuna
- ★ Mackerel



The WISEWOMAN project is funded by the Centers for Disease Control and Prevention under cooperative agreement #U58/CCU322798.

West Virginia WISEWOMAN

Summary

West Virginia is one of the most socio-economically disadvantaged rural regions in the U.S. and high rates of poverty, unemployment, low education, and limited access to health service

➤ lead to increased risk for cardiovascular and other chronic disease

Nationally West Virginia has the highest rate of heart disease and diabetes and ranks 2nd in the prevalence of obesity, hypertension, and tobacco use

Baseline data from the health risk survey and clinical assessment of 733 participants show high rates of overweight and obesity, high blood pressure, diabetes and cholesterol

Culturally targeted and individually tailored health education communications were designed to help reduce this risk

